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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,245	05/25/2001	Nanami Miki	450100-03244	4576

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745 FIFTH AVENUE- 10TH FL.  
NEW YORK, NY 10151

EXAMINER
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RAMAN, USHA

ART UNIT	PAPER NUMBER
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2424

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09/01/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/866,245	<b>Applicant(s)</b> MIKI ET AL.	
	<b>Examiner</b> USHA RAMAN	<b>Art Unit</b> 2424	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,6,7,9-15,18,21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,6,7,9-15,18,21 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 19<sup>th</sup>, 2009 has been entered.

***Response to Arguments***

2. Applicant's arguments with respect to claim 1, 11 and 23 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 1, 6, 9-13, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein et al. (US Pat. 6,133,909) in view of Hatakeyama et al. (US Pat. 5,469,354), Turtle et al. (US Pat. 5,488,725) and Boyer et al. (US 7165098).

In regards to claim 1, Schein teaches an electronic program guide retrieval method (see column 1, lines 49-56) comprising the steps of:

Receiving an input retrieval keyword from a client side (see column 2, lines 18-23);

Accessing a EPG database to search program records based on an input retrieval keyword; (see column 13, lines 33-39) to retrieve query results related to the input retrieval keyword (col. 13, lines 36-43).

Schein fails to disclose that when an input retrieval keyword is input, at least one additional keyword is extracted from a dictionary database, and searching a plurality of databases, including a movie information database and a drama information database as a function of at least one extracted keyword and the input retrieval keyword.

In a field of query processing method, Hatakeyama discloses that when a user submits a search term (i.e. input retrieval keyword), the system expands the input keyword by consulting a synonym dictionary to extract at least one additional keyword as a function of input retrieval keyword (see col. 31, lines 24-52), wherein the expanded query comprising extracted additional keywords are supplied for searching. Accordingly Hatakeyama discloses searching using only additional keywords (i.e. searches the expanded query). Hatakeyama further discloses that the expanded query includes synonyms that are spelling variants of the input query (col. 31, lines 30-35).

Turtle additionally identifies synonyms comprising misspellings of query (col. 13, lines 14-18), wherein it is noted that misspelling is a spelling variant of a term.

In a further related art, Boyer further discloses that program guide databases can comprise a plurality of databases including program listing databases, movie databases, etc. [0041]

It would have been obvious to one of ordinary skill in the art to modify the query processing method of Schein with the teachings of Hatakeyama, Turtle so that when a user enters a query, an expanded query comprising spelling variants of the keyword, including misspelled words maybe extracted from a synonym dictionary and using the expanded query for searching the database as a function of the input retrieval keyword. Such a query processing method would yield closer matches based on keywords that are closely related to the input retrieval keyword. It would have been further obvious further modify the EPG database by providing a plurality of databases, including movie databases and drama database and program guide data, so that various types of programming can be searched.

Claim 11 is an apparatus claim corresponding to the method claim 1, and is analyzed and rejected as previously discussed.

As to claim 6, the modified system discloses wherein the retrieval keywords and the at least one extracted additional keyword are interrelated to each other by virtue of being synonyms. Accordingly, each and every limitation of claim 6 is taught by the combination of Schein in view of Hatakeyama, Turtle and Boyer.

As to claim 12, Schein's system contains a database, which could be located in the set-top box, television, or the like (i.e., client side see column 9, lines 21-36).

As to claim 13, the modified system further discloses a system containing a database, which could be accessed via the Internet (i.e., data server side), see Schein: column 8, lines 62-67 thru column 9, lines 1-9.

Applicant's claim 21 recites the EPG system of claim 11, wherein the program information includes data relevant to place names. As discussed above, the combination of Schein in view of Hatakeyama, Turtle and Boyer contains all limitations of claim 1. When searching an EPG database (Schein: column 1, lines 49-56), a user may enter certain attributes (i.e., keywords, Schein: column 2, lines 18-23), which retrieve information relevant to the entered keyword from the EPG database (Schein: column 12, lines 66-67 thru column 13, lines 1-20 & 33-48). Once the relevant information is retrieved, the user selects the desired EPG data (Schein: column 13, lines 33-48). The system is silent on that the program information retrieved can be relevant to place names. However since the modified system correlates an input retrieval keyword with an expanded retrieval keywords from a expander dictionary, it would have obvious to correlate certain type of program information with name with geographic names. For example, if a user enters "cowboys" as a keyword, it would be advantageous correlate it to Dallas Cowboys football game to be played in Texas. Accordingly it would have been obvious further include data relevant to place names in program information so that user can obtain programming information on programs associated with geographic places.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being patentable over Schein et al. (US Pat. 6,133,909) in view of in view of Hatakeyama et al. (US Pat. 5,469,354),

Turtle et al. (US Pat. 5,488,725) and Boyer et al. (US 7165098) and further in view of Livowsky (US Pat. 6,598,030).

Applicant's claim 7 recites the EPG of claim 1, wherein when part of a retrieval keyword is entered, the entire keyword and the relevant-keyword information are retrieved from a database storing previously input keywords in a predetermined order. The modified system fails to disclose whether the system is capable of storing previously entered keywords in a predetermined order. However, within the same field of endeavor, Livowsky discloses a method of searching a database, whereby the database "learns" from a user's past entries (i.e., keywords) and updates the database accordingly. (column 2, lines 26-33; column 8, lines 8-15). Therefore, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to further modify the system with the "learning" capability of Livowsky's database in order to provide the user with a more expansive and flexible searching tool, which would be capable of updating the database.

6. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being patentable over Schein et al. (US Pat. 6,133,909) in view of in view of Hatakeyama et al. (US Pat. 5,469,354), Turtle et al. (US Pat. 5,488,725) and Boyer et al. (US 7165098) as applied to claim 1 and further in view of Huxley et al. (US Pat. 6,134,547)

Applicant's claim 9 recites the EPG of claim 1, the modified system is silent as to when the particular genre is relevant to cooking, while the different genre is relevant to cooks.

In an analogous art of program database query, Huxley discloses the method of tracking in a database person to their profession (e.g. actor, composer, etc.) and movie/programs. By relating the name to profession and credited work, a user can query the person by their name or profession or credited work obtain a match.

Examiner further takes Official Notice that at the time of the invention, programs of cooking genre were well known in the art at the time of the invention and as such EPG contained program information of programs related cooking genre. It would have been obvious to one of ordinary skill in the art to further modify the system by expanding the synonym dictionary to include all relational fields as taught by Huxley, so that the expanded query searches a particular show (e.g. cooking show) by all casts members (cooks) involved.

Applicant's claim 10 recites the EPG of claim 1, wherein modified system fails to disclose that the particular genre is relevant to place names; the different genre is relevant to names of persons.

In an analogous art of program database query, Huxley discloses an query method when a user types in a keyword such as 'John Williams', the related search retrieves additional keyword related to the person wherein the additional keyword includes an adjective related to place name (e.g. American Composer). Huxley additionally discloses that any keywords maybe used as an input retrieval keyword. Therefore there exists scenarios, wherein a user may enter "American composer" (i.e. input retrieval keyword genre has an adjective related to place names) and the retrieved keywords is names of people that are American composers.



It would have been obvious to one of ordinary skill in the art to further modify the system by correlating job profession with places and persons, thereby allowing a user to query profession by country and obtain a list of persons.

7. Claim 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein et al. (US Pat. 6,133,909) in view of in view of Hatakeyama et al. (US Pat. 5,469,354), Turtle et al. (US Pat. 5,488,725) and Boyer et al. (US 7165098) and further in view of Beach et al. (US Pre Grant Pub. 2003/0014753).

Applicant's claim 14 recites the EPG system of claim 11, wherein said client downloads and stores the program information. The modified system fails to teach whether the client is capable of downloading and storing program information. However, within the same field of endeavor, Beach further discloses the client unit is capable of downloading and storing program information. (Page 1, Par. (0018)). Therefore, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to further modify the EPG system with the client side downloading/storing capability of Beach in order to provide the client with an efficient method of storing EPG programming.

8. Claims 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein et al. (US Pat. 6,133,909) in view of in view of Hatakeyama et al. (US Pat. 5,469,354), Turtle et al. (US Pat. 5,488,725) and Boyer et al. (US PG Pub. 7165098) and Livowsky (US Pat. 6,598,039).

Applicant's claim 15 recites the EPG system of claim 11, wherein the client access a necessary part of the data server via a routing server, which stores route

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information for the data server. The modified system fails to disclose the additional limitations of claim 15. However, within the same field of endeavor, Livowsky discloses a searching database wherein the user accesses the desired portion of the system database (i.e., data server) via a system server, which distributes (i.e., routes) the search requests among core engines (column 2, lines 44-57; column 4, lines 1-12 & 30-36). Accordingly, it would have been obvious to one of ordinary skill in this art at the time of applicant's invention further modify the system with the multiple server system of Livowsky in order to provide a more efficient searching system.

In regard to claim 23, Schein discloses an EPG retrieval system comprising:

A data server including a plurality of databases, one of which is a television electronic program guide database for storing program information of an EPG (see column 8, lines 62-67 and column 9, lines 1-9) containing only (this is inherent because Schein teaches identifying each show with various identifiers so that a selection/search criteria matching that identifier produces results matching only those preset identifiers defined by a EPG provider and not some arbitrary identifier; see column 11, lines 46 thru column 14, line 10) keywords determined by an EPG provider as retrieval keywords;

A client having a certain data storage capacity (hard disk 14) comprising input means (user input 20) for inputting a retrieval keyword for retrieving the program information (see column 3, lines 24-32);

Schein fails to disclose a dictionary database storing retrieval keywords and relevant keywords and that when an input retrieval keyword is input, at least one additional keyword is extracted from a dictionary database, and searching a plurality of databases, including a movie information database and a drama information database as a function of at least one extracted keyword and the input retrieval keyword.

In a field of query processing method, Hatakeyama discloses that when a user submits a search term (i.e. input retrieval keyword), the system expands the input keyword by consulting a synonym dictionary to extract at least one additional keyword as a function of input retrieval keyword (see col. 31, lines 24-52), wherein the expanded query comprising extracted additional keywords are supplied for searching. Accordingly Hatakeyama discloses searching using only additional keywords (i.e. searches the expanded query). Hatakeyama further discloses that the expanded query includes spelling variants of the input query (col. 31, lines 30-35).

Turtle additionally identifies synonyms comprising misspellings of query (col. 13, lines 14-18), wherein it is noted that misspelling is a spelling variant of a term.

In a further related art, Boyer further discloses that program guide databases can comprise a plurality of databases including program listing databases, movie databases, etc.

It would have been obvious to one of ordinary skill in the art to modify the query processing method of Schein with the teachings of Hatakeyama, and Turtle so

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that when a user enters a query, an expanded query comprising spelling variants of the keyword, including misspelled words maybe extracted from a synonym dictionary and using the expanded query for searching the database as a function of the input retrieval keyword. Such a query processing method would yield closer matches based on keywords that are closely related to the input retrieval keyword. It would have been further obvious further modify the EPG database by providing a plurality of databases, including movie databases and drama database and program guide data, so that various types of programming can be searched.

The modified system comprises a plurality of types of databases as disclosed by Boyer fails to disclose a routing server having an access unit for accessing selectively the database and routing information, wherein the client sends the relevant keyword to the routing server and accesses one of the databases via the routing server and performs retrieval by accessing program information by selecting the route to the database.

Livowsky discloses a searching database wherein the user accesses the desired portion of the system database (i.e., data server) via a system server, which distributes (i.e., routes) the search requests among core engines (column 2, lines 44-57; column 4, lines 1-12 & 30-36).

It would have been obvious to one of ordinary skill in this art at the time of applicant's invention to further modify the system with the multiple server system of Livowsky in order to provide the client access to databases at the data server using

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routing servers for various routes for load balancing, thereby providing a more efficient searching system.

9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schein et al. (US Pat. 6,133,909) in view of in view of Hatakeyama et al. (US Pat. 5,469,354), Turtle et al. (US Pat. 5,488,725) and Boyer et al. (US PG Pub. 2008/0275914) and further in view of Lee et al. (US Pat. 6,463,428).

Applicant's claim 18 recites the EPG system of claim 11, wherein said dictionary database stores previously input keywords so that the input keywords are included in the relevant-keyword information, and the stored keywords are arranged in order of frequency of use. The modified system fails to teach the limitations of claim 18. However, within the same field of endeavor, Lee et al discloses a system capable of storing keywords and ranking them based upon their frequency of use (column 5, lines 8-16; column 15, lines 10-64; Fig. 18). Accordingly, it would have been obvious to one ordinarily skilled in this art at the time of applicant's invention to further modify the system with the retrieval keyword storage capability of Lee et al in order to provide the user with a more efficient searching system.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to USHA RAMAN whose telephone number is (571)272-7380. The examiner can normally be reached on Mon-Fri: 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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